

**TECHNICAL SUPPORT FOR THE  
CENTER FOR ENTERPRISE INTEGRATION**

**DELIVERY ORDER FOR  
GCCS DATABASE MIGRATION**

**AD HOC QUERY USER HANDBOOK  
25 July 1996**

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## **PREFACE**

This User Handbook was developed to provide assistance in the navigation and use of basic Global Command and Control System (GCCS) Joint Operation Planning and Execution System (JOPES) Ad Hoc Query (AHQ). Section One describes the method of getting started, application menu structure, and provides the application “How-to” procedures for rudimentary operations. Section Two presents frequently asked questions, and Section Three provides useful tips.

## **REVISION HISTORY**

This document is an adaptation of the larger AHQ User Manual. It has been updated with procedures applicable to GCCS Version 2.1 Update Tape 5.5.4.i.

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## SECTION 1 - SYSTEM OVERVIEW

### 1.1 GETTING STARTED

Desktop vs. JNAV: AHQ can be launched from the DeskTop by double clicking on the JOPES icon to launch JOPES Navigation (JNAV) and then clicking on the AHQ icon.

### 1.2 APPLICATION MENU STRUCTURE

- File
  - New, Open, Save, Save As, Delete, Export, and Import
- Report
  - Qualify, Display, Do It

### 1.3 APPLICATION “HOW-TO”

AHQ provides users with a flexible tool to construct database queries. Initial execution of AHQ is from the GCCS Desktop, where actuating the icon initiates the AHQ session. The only action necessary to construct a query and develop output is the designation of fields. The actions of a typical AHQ session include identifying data for selection, qualifying the criteria to limit the number of records retrieved, selecting fields for display, and selecting format options for the report. Once a query is defined, select Do It to generate the report.

The AHQ Main Menu (details to follow shortly) consists of the following pull-down options:

- File
- Report.

#### 1.3.1 Ad Hoc Query Main Menu

The opening screen to AHQ provides the capability to focus the retrieval (Figure 1-1). Select a single plan or up to 20 plans in the database to use as a source of information for the retrieval as well as specific groupings of information.

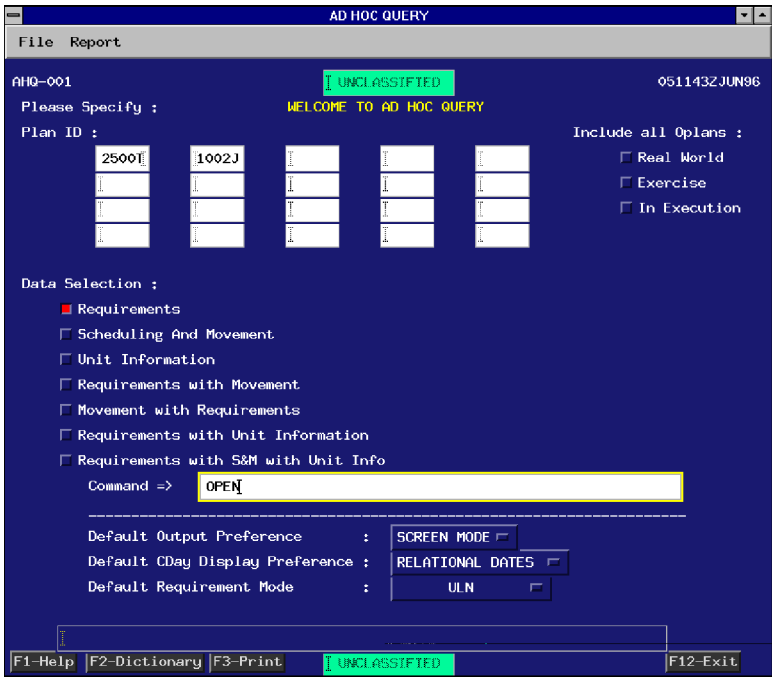


Figure 1-1: Ad Hoc Query Main Menu.

**1.3.1.1 Plan ID.** To select a plan or plans (up to 20), enter the Plan Identification Number (PID) in the "Plan ID:" block(s). This PID becomes a qualification from which the retrieval will come, ignoring all plans that are not listed, with the exceptions listed in “Include All Oplans (Operation Plans) options.

**1.3.1.2 Include All Oplans.** The “Include All OPLANs” selection allows the user to select, in addition to OPLANs specified in the Plan ID blocks, all Real World, all Exercise, and/or all OPLANs in execution.

**1.3.1.3 Data Selection: Categories.** Depending on the data selection category selected on Figure 1-1, Ad Hoc Query Main Menu, a standard set of data elements will be displayed with the data from the designated plan(s). Once the subset of the database "collection" is defined, the user may select any associated data field in the GCCS JOPES Core Database. Though not required for a query, these selections offer a conventional starting point:

- Requirements
- Scheduling and Movement
- Unit Information
- Requirements with Movement
- Movement with Requirements
- Requirements with Unit Info
- Requirements with S&M and Unit Info.

**1.3.1.4 Command Line.** The command line is used for rapid navigation commands that move directly to a specific screen or cascade menu by simply typing in the four letter identifier for that function.

**1.3.1.5 Message Line.** The message line at the bottom of the screen is a n information line where the system sends messages about what is happening o r warnings when the system/operator has a problem.

**1.3.1.6 Buttons.** The bottom of the screen provides four buttons: Help (F1) , Dictionary (F2), Print (F3), and Exit AHQ (F12).

**1.3.1.7 File Pull-Down Menu.** The File Pull-Down Menu provides users with the ability to perform basic file operations on a query. When File is selected from th e Main Menu, a cascading menu is presented with the following options: New, Open, Save, Save As, Delete, Export, and Import.

**1.3.1.8 Report Pull-Down Menu.** The Report Pull-Down Menu, allows the user to perform three functions: qualify a report, format the display of a report, and execute a process with the command Do It.

**1.3.1.9 Defaults.** There are three defaults which may be set by the user. The preset default values are for use of the output preference, CDay preference and the Default Requirement Mode.

**Default Output Preference.** The user has the ability, displayed at Figure 1-2, to run the query to the screen, or if it is a process which would be of some duration, it could be run in the background or in Batch mode. The location of th e output is by default initially placed at /h/USERS/< UserId>/Ahq /Ahq\_Batchmode\_Results\_YYM MDD\_HHMMSS. The result is a tab delimited file intended to be imported into a spreadsheet or wordprocessor of the users choice.



Figure 1-2: Default Output Preference .

**Default CDay Display Preference.** If CDay has been declared for th e OPLANs selected, the user ha s the option of selecting “real dates” or relational dates. See Figure 1-3.



Figure 1-3: Default CDay Display Preference .

**Default Requirement Mode.** The user is afforded the opportunity o f selecting the type(s) of Requirement to be addressed, either Unit Line Number (ULN) or ULN/CIN/PIN. If a user desires Non-Unit Data retrieved in a query, ULN/CIN/PIN mode **must** be selected. Additionally, performance enhancements may be achieved by narrowing the scope of the query, so ULN has been set as the default mode. See Figure 1-4.

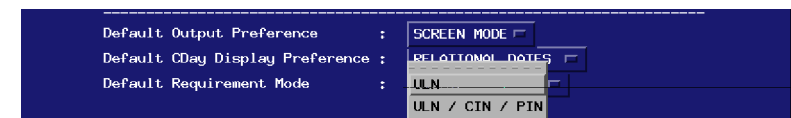


Figure 1-4: Default Requirement Mode .

## 1.3.2 Qualification Process

The Qualify Query allows retrieval of collections of data by specifying combinations of data characteristics in retrieval equations, called qualifications o r filters. The screen provides an assortment of tools for building the query lines tha t determine which information is shown in the data specification area. Virtually an y data element of a movement requirement may be used in a query line. Properl y planned retrievals can be used to group and display significant movement requirement

factors. The Qualification option provides the path to further focus retrievals to the specific information needed. Remember, qualification on the OPLAN ID(s) has occurred. This will be the first path to follow because it is the heart of the retrieval program. The command line shortcut command is QUAL.

**1.3.2.1 Qualify Query Screen.** The Qualify Query screen, Figure 1-5, is where qualification begins. It is divided into several parts. Across the top, down the left side, and across the bottom are action/selection keys. They are used to select specific data elements as qualifiers and how they are to be treated in the retrieval process. The right side of the screen, the data specification area, is where the retrieval equations

Figure 1-5: Qualify Query Screen.

(query lines) are laid out and where the actual values for some qualifiers are entered. An unlimited number of "and" statements in a single section are allowed, but only 21 "or" statement blocks are available. Begin by selecting the first qualification item desired.

**1.3.2.2 Menu Bar.** The Menu Bar packages data elements into logical subgroups, thus avoiding a screen with hundreds of items plus items listed for selection. Access to virtually all the data elements of the Time Phased Force Deployment Data (TPFDD) is available. By selecting one of the Menu Bar picks, a pull-down menu is presented that eventually leads to specific data elements for qualification.

**1.3.2.3 Operators.** Having picked qualification data, the user must tell the system what to do with the operator, such as, finding data elements that match a specific value or range of values. Symbols, called operators, perform that function. The operators are located on the left side of the Qualify Query screen. Each time an attribute is selected from the pull-down menus, select an operator to tell the system how that attribute should be treated in relation to the value. The operators are available on the screen and are selected with a simple point and click. When selected, the operator is stored in the system for use with the F6-Value entry activity. This action completes the second step of creating a query line. The operators are:

**Equal (=).** Exactly Equal To. This operator is used when an exact match to a specified value is desired. A specific value must be entered to complete the line. Clicking on the **F6-Value** button causes a pop-up to appear with the menu item displayed and allows entry of the exact value for which to search. Wildcards are not useful here because the system will look for the exact wildcard character in the string of characters instead of any character in that spot.

**Not Equal (!=).** This operator retrieves everything except an exact match of the entry.

**Like.** Like means similar to. It is used most often in conjunction with wildcard searches. For example, if information is desired about all GEOLOCs that begin with an F, the value entry would be F\*.

**Not Like.** Not like means not similar to.

**In List.** This operator will retrieve all records with the selected parameter values of everything contained in a list. The user will be prompted for a value or series of values.

**Not In List.** This operator will retrieve all records with the selected parameter values of everything not in the list. The user will be prompted for a value or a series of values.

**Between.** This operator will retrieve all records inclusive, between starting and ending values. The user will be prompted for upper and lower bounds.

**Less Than (<).** This operator will retrieve all records with the selected parameter value less than the specified value, excluding the value entered. An example is when latest arrival date or LAD<C010 is used as the operator and value, the activity must have occurred before C010.

**At Most (<=).** This operator will retrieve all records with the selected parameter value less than or equal to the specified value. In other words, items whose value is less than or equal to the entered value (e.g., LAD<=C009 gets the same results as LAD<C010).

**Greater Than (>).** This operator will retrieve all records with the selected parameter value greater than the specified value, excluding the value entered. An example is when LAD>C010 is used as the operator and value, the activity must have occurred after C010.

**At Least (>=).** This operator will retrieve all records with the selected parameter value greater than or equal to the specified value. In other words, items whose value is greater than or equal to the entered value (e.g., LAD>=C011 gets the same results as LAD>C010).

**Missing.** This operator will retrieve all records with the selected parameter value of null.

**Not Missing.** This operator will retrieve all records with the selected parameter value of not null.

**1.3.2.4 F6-Value Button.** This option allows manual entry of a value in the data specification line. It can only be selected after a data choice is made, an operator has been chosen, and a specific value is/is not needed.

**1.3.2.5 Data Specification Area.** The three blank blocks seen on the left side labeled A:, B:, and C:, make up the data specification area. (The area extends to block U.) Query lines that define the retrieval are built here. The maximum number of "and" lines that can be created in any one of the blocks is unlimited. Pointing and clicking on pull-down/cascading menu selections of attributes, operators, and values in the correct order, post those selections to the active block. A block is activated by pointing and clicking on the toggle just to the right of the letter. Within the boxes

area, each line is considered an "and" statement. Between the blocks, the statements are "or".

**1.3.2.6 Building a Query.** Building a query involves use of the mouse to pull-down menus and select attributes, operators, and values.

**Menu Bar.** Start building the query lines by selecting the attribute needed and activating one of the buttons on the menu bar above the user specified record retrieval area. The choices and functions of these buttons were previously described. Remember the selections from the menu bar pull-downs may also be used as data values for each query line after the attribute and operator have been selected.



Figure 1-6: Menu Bar.

In some cases, the pull-down menus open paths to additional cascading selection menus that allow further refinement of the choices. Remember, an option followed by an arrow ">" indicates additional cascades are available. Figure 1-6 depicts the Qualify Query menu bar.

As each selection is made from the Menu Bar and subsequent cascades, the choice is pasted to the query line in the active data specification block (button depressed) on the first available line. To be complete, the query line must begin with a topic, followed by a qualifying operator, and end with a data value.

**F9-Clear.** The **F9-Clear** button is activated by a point and click on the screen or by pressing the F9 key on the keyboard. It clears the entire screen, all "or" blocks, in preparation for the next retrieval.

**Letter Toggles.** The letter toggle button (A:, B:, C :, D:,...) determines which data specification block is active. The attributes and operators selected will post to that block, building the query line by line.

**Scroll Bar.** A scroll bar will appear to the right of an "and" area when the area beyond what is normally visible on the screen is filled in. If this condition occurs, use the scroll bar to view query lines not currently visible in the window. The scroll bar also acts as a reminder that more data exists than is currently on the screen.



Figure 1-7: Format Report Display.

1.3.3 Format Report Display

This option provides the ability to design the output format (report or display) for a retrieval. This is a critical step in the process because "how" the material is presented to the reviewer can greatly facilitate understanding and influence the decision(s) made as a result of the report. Keep it as simple as possible. The command line shortcut from the main screen is DISP, the result of which is Figure 1-7. There are three areas of the screen which embody separate functions dealing with the manipulation of the output. The first function is the selection of fields to be displayed. The second function is the sort and group activities, and the last function is the use of the Master function.

**1.3.3.1 Selection of Columns.** Depending upon the choice of categories selected on the initial screen, a defaulted set of fields will appear. Columns may be inserted, deleted, split, header changed, resized, and/or moved. **Note:** Be mindful that addition or deletion of columns may change relationships between data elements, e.g., deleting

columns with a one-to-many relationship such as ULN to Cargo Category Codes. This can cause the previously viewed collection to change materially.

**1.3.3.2 Insertion of Columns.** To add a column to the report, use the same convention as applied in the qualification routine. Simply select the appropriate field description from the pull-down menu's above. The field will be inserted at the position designated by the column slide bar. For instance, if the slide bar is at position 3, the field will be inserted at position 3. See Figure 1-8.

**1.3.3.3. Do It.** The **Do It** button causes the system to initiate the retrieval as designed.

**1.3.3.4 F9-Clear Columns.** The **F9-Clear** button clears the entire display to start a new display format.

**1.3.3.5 F8-Delete Column.** The **F8-Delete Column** button deletes the column specified by the column position slide bar.

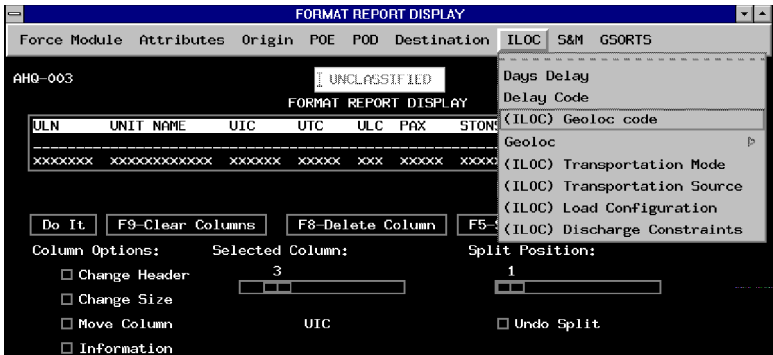


Figure 1-8: Column Insertion.

**1.3.3.6 F5-Split Column.** The **F5-Split Column** button splits the column specified by the column position slide bar. Slide bars move upon depression of the mouse. In Figure 1-9, the selected column UNIT NAME would be split at position 10 (from the left).



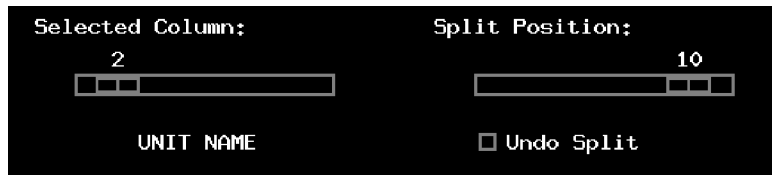


Figure 1-9: Slider Bars.

**1.3.3.7 Undo Split.** If desired, the user may undo the previous splitting by selecting the “undo split” button. The column split will create a new field which will require a name. A pop-up will be presented allowing the user to name the field.

**1.3.3.8 Column Options.** The Column Options buttons; **Header**, **Size**, and **Move** allow changes in the name, size, or position of each column. The **Information** button displays current selection parameters on the column selected.

**1.3.3.9 Sorting.** The sort options area allows establishment of how the system will order the data elements selected for the query.

The **Add Sort** button allows the user to select fields on which to sort. Be aware that when selecting the lowest common denominator as a sort (element that can only appear once in a column), no further subsorts are possible and if selected, will be not change the results. The sort position is dependant upon the row selected in the sort box, e.g., select the first row and the column identified by the slide bar will become the primary sort. The **Delete Sort** works similarly.

The **Ascending** or **Descending** buttons select whether the system sorts from a(1) to z(999) or z(999) to a(1).

The sort options area allows establishment of how the system will order the data elements selected for the query (see Figure 1-10). The selection of proper sorts sets the stage for the production of meaningful, grouped reports.

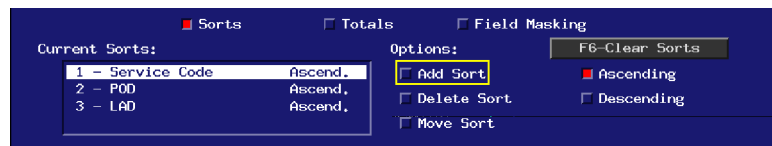


Figure 1-10: Sort Selection Function.

The **Add Sort** button allows the user to select fields on which to sort. The sort position is dependent upon the row selected in the sort box, e.g., select the first row and the column identified by the slider bar will become the primary sort. The **Delete Sort** works similarly. The **Move Sort** presents the user with a pop-up window allowing the selection of position for the column selected. The **F6-Clear Sorts** removes all the sorts selected.

The **Ascending** or **Descending** buttons select whether the system sorts from a(1) to z(999) or z(999) to a(1). Sort Order. The A-Z sort order produces this sort sequence:

1. Spaces (blanks)
2. Numbers 0-9
3. Letters A-Z.

This means that any field with leading blanks will display at the head of the list. (And, while not proper, and not easily noticed, some TPFDD text fields may have leading blanks.)

**Current Sorts.** The selected sorts area displays the selections made in the Sort Options block. The **F6-Clear Sorts** button clears all sort options in one motion and starts the sort selection activity over.

**Ascending/Descending.** Upon selection of the above sorts, the user may select the sort to go in either direction, with ascending as described above. The descending sort reverses this order.

**1.3.3.9.1 Common Problems with Sorting.** If a sorted collection appears to be out-of-order, verify the exact data in the sort field. For example, if the collection is sorted on a text field, and that field begins with a space in some records, those records will appear before any other records.

Be wary of sorting on TPFDD data that may be incomplete or unusual. Even standard coded fields may have spurious data.

**1.3.3.10 Total Options.** Groups and totalled reports are the most common types of reports. Grouping and totalling enables you to summarize data for groups of records, then add: accumulated, subtotal at various intervals and grand total at the end of the report. These capabilities are available under the Total Options. This section will

first discuss the operation of each of the features and is followed by a general discussion of sorting, grouping and totalling of complex reports.

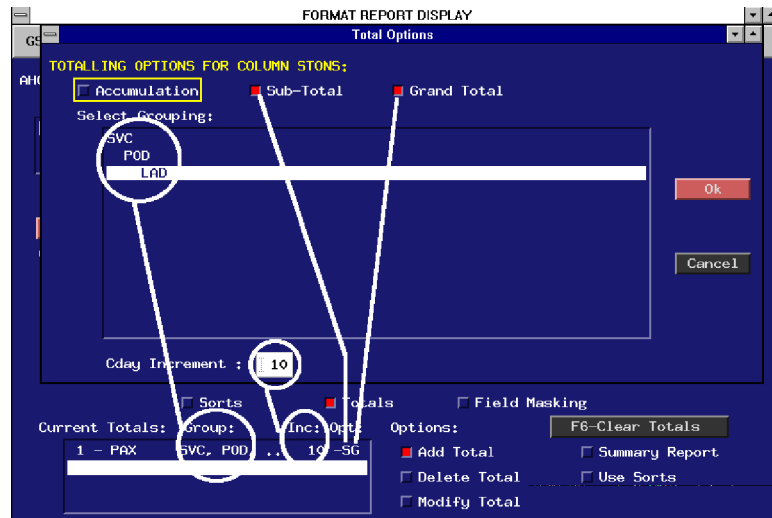


Figure 1-11: Total Options Pop-Up Display.

**1.3.3.10.1 Add Total.** Total fields are selected by identifying a numeric field using the column slider bar. Upon selection of the field, the user clicks on **Add Total**, a pop-up appears allowing the user to select a field by which to group the total upon. Three types of totals are presented to the user. The user is presented the opportunity to choose between Accumulation and Subtotal, as well as a Grand total. The default increment is five days. The increment may be modified upon selection of grouping for the individual field. In the case of Figure 1-11, the STONS field may be grouped by SVC or; SVC and POD or; SVC and POD and LAD. (These are the order of the sorts previously selected.)

Depicted in Figure 1-11 is an example of nested grouping. Based upon the previously designated sorts, nesting has been both implied and inserted into the Grouping selection. This is discussed in more detail at Paragraph 1.3.3.11.4.

The results of the selections are placed in the Current Totals list box. At the conclusion of the process for selecting groups, increments and types of totalling, select **Do It** on the AHQ-003 screen and results will appear in the list box of the AHQ-004 screen. A sample output is presented in Figure 1-12 where the groups for both Short Tons (STONS) and Passengers (PAX) were Service, POD and LAD in 10 days

increments with Subtotal and Grand total on STONS and PAX. Note that the grouped subtotals are identified by the grouping in brackets, [C020-C029], to ease identification.

SVC	POD	LAD	ULN	PAX	STONS
A	FTZH	C020	PAAC	88	1040,6
A	FTZH	C021	PAUJ	187	265,9
A	FTZH	C025	PAG1P	86	0,0
A	FTZH	C025	PAGJP	30	0,0
A	FTZH	C025	PAYEP	264	0,0
A	FTZH	C026	PAYQP	177	0,0
[C020 - C029]				832	1306,5
A	FTZH	C030	PAYF	2	5,7
[C030 - C039]				2	5,7
A	FTZH		PAG	0	0,0

Figure 1-12: Sorted, Grouped, and Subtotalled Results.

**1.3.3.10.2 Delete Total.** The **Delete Total** button requires the user to select a current total line first and then press the **Delete Total** button to remove a particular total.

**1.3.3.10.3 Modify Total.** The **Modify Total** button requires the user to select a current total line first and then press the **Modify Total** button to remove a particular total.

**1.3.3.10.4 F6-Clear Totals.** Activation of the **F6-Clear Totals** button removes all totals in the list box.

**1.3.3.10.5 Summary Report.** Activation of the summary reports button changes the presentation of the data to display values which are subtotaled in the existing report. This capability approximates the tabular reports available in the legacy JOPES F6 system. No te the Grouping and Totalling options selected in Figure 1-14.

	PAX	STONS
POD VKNP	:	
LAD C020 - C029	:	650 15249,5
LAD C030 - C039	:	0 27284,7
LAD C040 - C049	:	0 635,1
LAD C990 - C999	:	0 2474,5
SUB-TOTALS FOR POD VKNP	:	650 45643,9
POD VRJT	:	
LAD C000 - C009	:	1 308,5
SUB-TOTALS FOR POD VRJT	:	1 308,5
SUB-TOTALS FOR SVC A	:	39438 118828,4

Figure 1-13: Summary Report Output.

The non-summarized results are displayed in Figure 1-12. The Summary Report results are displayed at Figure 1-13.

☐ Sorts
☒ Totals
☐ Field Masking

Current Totals; Group; Inc; Opt;

1 - PAX SVC. POD. ... 10 -SG

2 - STON... SVC. POD. ... 10 -SG

Options:

☐ Add Total
☐ Delete Total
☐ Modify Total

F6-Clear Totals

☒ Summary Report
☐ Use Sorts

Figure 1-14: Summary Report Totals

Total Options

TOTALLING OPTIONS FOR COLUMN PAX:

☒ Accumulation
☐ Sub-Total
☐ Grand Total

Select Grouping:

SVC

POD

LAD

Ok

Cancel

Cday Increment : 10

Figure 1-15: PAX Totals Grouped on SVC then POD and LAD.

**1.3.3.10.6 Use Sorts.** The Use Sorts button is provided to get the user started on the selection of logical groupings for the report. The grouping will be based on the order the sorts have been selected. Typically, the sorts selected will order the data in the method preferred for both comprehension and presentation.

**1.3.3.10.7 Hints on Sorting and Grouping.** Most reports created require that data be organized in groups and subgroups, in a style similar to the outline of a table of contents. AHQ allows you to establish the initial grouping and sorting properties of your data, see Figure 1-14. The groups are limited only by the number of Sorts applied to the data.

Grouping data. The method you use to group data depends on the data in the field by which you group. You can group by categories, where each category represents a unique value, such as PODs. You can group by a range of values, which are usually numeric, such as LAD, but you can also group by an alphabetic range. Nested grouping is displayed in Figure 1-15. Totals on PAX will be presented by LAD in 10 day increments, with subtotals for each 10 day increment, then subtotals for each POD and then a subtotal for each SVC. Grand totals will be presented for PAX and STONS.

If you elected to group by a particular data element, you can alter the grouping by selecting the grouping window, select the field desired and press **Ok**.

If you use a systematic code within a field for grouping, you can add another of the same field, and split the field to enable grouping by the desired values.

**1.3.3.11 Field Masking.** Field Masking is engaged by selecting the field masking button displayed on Figure 1-16.

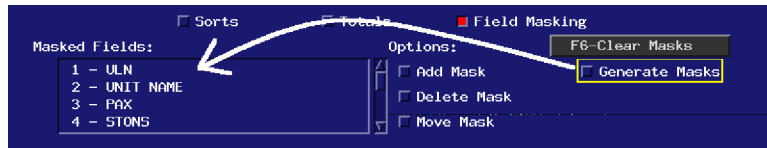


Figure 1-16: Field Masking.

**1.3.3.11.1 Field Masking General.** There are occasions where AHQ will be asked to present data with one-to-many relationships. Since AHQ is truly ad hoc, the application cannot know in advance the relationship of the data that is desired for presentation. This can be disconcerting, particularly when totalling numeric values, as it presents data in ways not intended. Figure 1-17 displays such an example. Note the total values for PAX and STONS.

ULN	UNIT NAME	PAX	STONS	M	S	LAD	PIF	SSF	Carrier ID
P0FH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-01
P0FH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-02
P0FH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-03
P0FH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-04
[P0FH ]		860	57432.4						

Figure 1-17: Results of Query with Data NOT Masked.

Although the data returned is accurate, and the totals are calculated correctly, this is probably not the result desired. The data is displayed in this manner because of the unique (one-to-many) Carrier ID's associated to one ULN. Proper use of field

ULN	UNIT NAME	PAX	STONS	M	S	LAD	PIF	SSF	Carrier ID
P0FH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-01
									AMC2500T-02
									AMC2500T-03
									AMC2500T-04
[P0FH ]		215	14358.1						

Figure 1-18: Results of Query with Data Masked.

masking allows the user to correct this condition as depicted in Figure 1-18. The fields which have duplicative data, as designated by the fields masked, are neither displayed or in the case of numeric values, summed.

**1.3.3.11.2 Use of Field Masking.** The field selected is designated by the column slider bar. For instance, if the slider bar is at position 3, the field will be selected for masking will be inserted in the list box upon selection of the **Add Mask** button. The delete mask button requires the user to first highlight the desired field in the list box and then toggle the **Delete Mask** button. The **Move Mask** presents the user with a pop-up window allowing the selection of position for the column selected. The **F6-Clear Masks** removes all the masking selected. The **Generate Masks** button is a rudimentary method of assisting the user in the creation of maskings. The algorithm takes the first sort as the base field, and generates masks for duplicative data associated with that field.

**Note:** Where the user creates many-to-many relationships with the data, such as a display of ULNs, Force Modules, Carrier IDs and Cargo Category Codes, masking may not achieve the desired affect.

**1.3.3.12 Master.** The master function is an advanced AHQ tool available for users who need visibility of data with NULL fields. AHQ's underlying language is that of Standard Query Language or SQL. Both SQL and most modern relational database query languages improve their performance by eliminating data that has a NULL value. In other words, if nothing exists for the query, nothing is displayed. This offers potential problems for some users. Occasionally, the existence of NULL value for data has importance. The master column is selected by use of the slide bar.

AD HOC QUERY RESULTS

AHQ-004

UNCLASSIFIED

061100ZJUN96

AD HOC QUERY RESULTS

UNCLASSIFIED

Select Classification

Line 1 of 12

Page 1 of 1

Query Time 1:12

(POD)

LAD

ULN

UNIT NAME

UTC

PAX

STONS

JERBA/ZARZIS	C007	POFB	0073 AR BN	WH23TO	215	546.2
JERBA/ZARZIS		POFH	0073 AR BN	WH23TO	215	14358.1
JERBA/ZARZIS						
JERBA/ZARZIS						
JERBA/ZARZIS		POGC	0073 AR BN	WH23TO	215	546.2
JERBA/ZARZIS		PABG	0073 AR BN	WH23TO	215	546.2
JERBA/ZARZIS						
[C005 - C009]					860	15996.7
[JERBA/ZARZIS]					860	15996.7
THYNA/EL MAOU	C002	PBHR	0436AP050000	FFCPG0	8	0.0
THYNA/EL MAOU		PBHT	0436AP050000	FFCPG0	28	0.0

Format Report

Carrier Detail

Enter Search Item

Save Report

ULN Detail

F6-Search Prev

Title Report

F9-Search Next

F4-Up

F5-PgUp

F7-PgDn

F8-Dn

F1-Help

F2-Dictionary

F3-Print

UNCLASSIFIED

F10-Back

F11-Menu

F12-Exit

Figure 1-19: Ad Hoc Query Results Display.

1.3.4 Ad Hoc Query Results

The results displayed upon selection of the **Do It** button, Figure 1-19, shows data elements that were selected on the initial screen. In the case of a Requirements selection, the collection displayed is the set of qualifying records that are in the "collection." The collections will vary as a result of the data set selected. This section of the screen also has several other buttons that provide additional functionality.

**1.3.4.1 Search Up/Down.** Allows searching through the records in the collection.

**1.3.4.2 Format Report** Selection of this button allows the user to initiate an Applix session. Output as displayed on the screen is ported directly to the spreadsheet portion of Applix for manipulation, graphing, and reports as desired by the user.

When selected, a pause of a few seconds will occur and output is presented in a format similar to Figure 1-20.

**1.3.4.3 Save Report** The user may specify the report be saved to a tab delimited ASCII file at the directory assigned the user by the System Administrator. From this

/export/home/smtcst/try.as

File Edit View Style Find Ranges Charts Utilities Window Help

Alt

ULN

	A	B	C	D	E	F	G	H	I	J
1	ULN	UNIT NAME	UIC	UTC	ULC	PAX	STONS	M	S	LAD
2	PAQH			37777	CO	124	3577.7	A	M	C005
3	PAJH			37777	CO	126	2912.8	A	M	C007
4	PAJJ			37777	CO	126	292.8	A	M	C002
5	PAKHC	0158AV	COWFJ480	37777	CO	0	3577.7	A	E	C025
6	PAKHP	0158AV	COWFJ480	37777	CO	124	0	A	K	C005
7	PAKJ	0158AV	COWFJ480	37777	CO	124	3577.7	A	K	C002
8										
9										
10										
11										

Figure 1-20: Applix.

directory, using Common Operating Environment (COE) tools, the file may be conveyed to other media or transferred via File Transfer Protocol (FTP) to the preferred Commercial Off-the-Shelf (COTS) package (e.g., MSOFFICE , WordPerfect, AmiPro).

**1.3.4.4 Detail Confirmation Screens.** Detail confirmation screens enable the user to determine the success of the record qualification process. If appropriate for the type of data, a radio button may be provided for either: Unit Line Number (ULN) detail or Carrier detail information. Selection of a button will provide detailed information on the record selected.

The user may desire to select other data fields or format the results further by selecting **F-10 BACK** and selecting the **FORMAT REPORT DISPLAY** from the **REPORT** menu.

## SECTION 2 - FREQUENTLY ASKED QUESTIONS

Q: Where are my saved files stored?

A: Under your USERID account established by your system administrator. When you run AHQ in batch mode, the results may be found at :

/h/USERS/<USERID>/Ahq/Ahq\_Batchmode\_Results\_YYMMDD\_HHMMSS

Q: When I select the "Format report", the message line says submitted. Why is nothing happening?

A: As you expected, an Applix spreadsheet should appear with your data on it. This could be a configuration problem at your site. An Applix macro script, located in the Applix directory should kick the process off. Until your system administrator fixes it, go ahead and launch Applix independently and the spreadsheet will be populated when "Format Report" is depressed.

Q: I kicked off a query and it returned 100,000 rows of data when only 25 rows should have qualified. What happened?

A: Often, out of World Wide Military Command and Control System (WWMCCS) JOPES habit, users in addition to the OPLAN ID, select Real World or Exercise. This causes AHQ to select, IN ADDITION TO YOUR OPLAN ID, all Exercise or all Real World records meeting your criteria.

Q: I have constructed a Query for all ULNs, CINs and PINs meeting certain criteria. After DO IT, no results are returned.

A: Check screen AHQ-001 and verify that the default requirement mode ULN/CIN/PIN has been selected.

Q: When I try and split a one character field, I get an error. Why?

A: The program logic doesn't understand why you want to do this.

Q: How do get my report into a spreadsheet on my Personal Computer (PC)?

A: When you select the 'save report' button on the AHQ-004 screen, it is saved under your user directory as a tab delimited ASCII file. The results may be found at :

/h/USERS/<UserId>/Ahq/Ahq\_Formatted\_Results\_YYMMDD\_HHMMSS

Using an FTP or RapidFiler™, transfer your files down to your PC application and use the Import function.

Q: When I change the format of my report, leaving all other qualifiers the same, I get different results. Why?

A: In the old WWMCCS database, data elements typically had a one-to-one relationship. In a relational database, one to many relationships often exist. Also, Standard Query Language (SQL) will often disregard fields where data is NULL making the results appear contra-intuitive. If a previous query worked as desired and an additional field is selected and provides erratic results, consider addition of the NOT NULL qualifier on the new field.

Q: My keyboard is acting strangely, the Enter key isn't responding. What is wrong with AHQ?

A: Try to disengage the Caps Lock key. AHQ doesn't understand the character string CapsLockEnter.

Q: Where are my exported files located?

A: Per the ahq\_env definition, exported files are located at /h/AHQ/data/export\_import. One of the problems frequently encountered by users is that people on different application servers do not export to and import from the same area. The solution to this problem is to NFS mount a common export/import area on all the application servers at a site and point the ahq\_env files to that common area.

Q: Why does F1-key not always list saved AHQ queries?

A: If the F1 key is not bringing up the list of saved queries, there is probably a key-mapping problem on the machines in question. First check to see if context sensitive help is working anywhere else in the application (e.g., in the F6-Value pop-up on the AHQ-002 screen). If it is not mapping, see your system administrator.

## SECTION 3 - TIPS

### HOW TO IMPROVE THE SPEED OF AHQ

AHQ uses SQL as the basis for requesting data from the Oracle database. Within the GCCS database, JOPES information is stored, at this writing, in 148 different tables. AHQ links the data elements you select from among those tables to form a query. To speed performance, indexes have been placed on the various tables. Imagine how useful a telephone book would be without the names in alphabetical order! GCCS runs a tool periodically (Analyzer) develops a set of indexes to improve performance, based upon previous queries. In spite of this indexing tool, the user can construct complex queries which drive Oracle to ignore the indices and process sequentially.

It has been observed that some queries take an awfully long time. In many cases, performance may be improved by the thoughtful construction of the Query by the user.

Rule 1: Only include columns you are truly interested in. If you know you are asking for ULN that does not have a POD, then do not include POD as a column in the query!

Rule 2: AHQ is much better at asking small specific questions, so if you can think of a way to ask a more specific question, you are more likely to get results you want in a timely manner. For example, if one query takes an hour, you may be able to separate the query into say five smaller pieces that run in two minutes each giving you the same information much more quickly.

Some other techniques include:

Table 3-1: Techniques for improving AHQ speed.

Technique	Slow Query	Faster Query
<u><b>Avoid</b></u> the <u><b>OR</b></u> operator	Data desired- ULN, Unit Name, POD with these Geolocation codes: FFTJ, ABAB, RXAB	
	Display- ULN, Unit Name, POD Qualify- POD=FFTJ <b>OR</b> POD=ABAB <b>OR</b> POD=RXAB	Display- ULN, Unit Name, POD Qualify- <b>POD IN LIST</b> (FFTJ, ABAB, RXAB)
Use the <u><b>BETWEEN</b></u> operator	Data desired--ULN, Unit Name, POD for records with an LAD from C004 to C009.	
	Display-ULN, Unit Name, POD Qualify- LAD >= C004 <b>AND</b> LAD <= C009.	Display- ULN, Unit Name, POD Qualify- LAD <b>BETWEEN</b> C004 AND C009.
<b>Add</b> redundant qualifications	Data desired-ULN, Unit Name, POD when POD=DEST and POD is FFTJ.	
	Display-ULN, Unit Name, POD Qualify-POD=DEST POD=FFTJ	Display-ULN, Unit Name, POD Qualify- POD=DEST POD=FFTJ DEST=FFTJ

Table 3-2: Qualifications to Reconsider.

Technique	Slow Query	Faster Query
<b>Avoid</b> certain forms of <b>wildcards</b>	Data desired- ULN, Unit Name, POD where the SRC is Field Artillery (The 20th character of the UNIT NAME Field when it has a value of '0.'	
	Display- ULN, Unit Name, POD Qualify-  UNIT NAME LIKE '*0*'	Display- ULN, Unit Name, POD Qualify- UNIT NAME LIKE ????????????????0*

Be wary of retrievals on fields that may have NULL values. TPFDD data is often incomplete. **Note:** When in doubt, check for missing values.

Be wary of hidden data entry lines. If a seemingly obvious retrieval does not perform as expected, check for a hidden data entry line that is modifying the overall effect. Scroll down and modify the data entry line as required.

Particularly when retrieving on text fields, expect data errors, spaces/blanks where there should not be any, and unusual spellings. Numbers in description fields often are preceded by zeros.

Double check for the correct dates and locations.

Use the results of the query to solve problems with the query. The results will often indicate the errors with the query.

When retrieving some characteristic of cargo, check whether it is only applicable to ULNs, or to both ULNs and CINs; to one form of lift rather than all forms; and whether it applies to standard or non-standard ULNs. There are significant differences between cargo values retrieved using the Unit Attributes Menu and those using the Cargo Attributes Menu.

**Common Problems with Sorting.** If a sorted collection appears to be out-of-order, verify the exact data in the sort field. For example, if the collection is sorted on a text field, and that field begins with a space in some records, those records will appear before any other records.

Be wary of sorting on TPFDD data that may be incomplete or unusual. Even standard coded fields may have spurious data.

### Constructing Logical Retrievals

The relationship among lines within a data entry area on the AHQ-00 2 screen is an **AND** relationship. This means that records must meet **all** specifications entered on all lines within that area to be included in the retrieval.

For example, the entry:

Block A - Requirement\_Type\_Code LIKE "U\*"

would retrieve All ULNs; while the two lines:

Block A - Requirement\_Type\_Code LIKE "U\*"  
Block A - Service = "A"

would retrieve **ONLY** the Army ULNs.

The relationship between data entry areas (A, B, C, thru U) is an **OR** relationship. The resulting collection will include records that meet the specifications in any one (or more) of the areas.

For example, the two sets of entries:

Block A - Requirement\_Type\_Code LIKE "U\*"  
Block A - Service = "A"  
Block B - Requirement\_Type\_Code LIKE "C\*"  
Block B - Service = "A"

would retrieve **BOTH** the sets of all Army ULNs, and all Army CINs.

**Note:** Be mindful that addition or deletion of columns may change relationships between data elements, e.g., deleting columns with a one-to-many relationship such as ULN to Cargo Category Codes. This can cause the previously viewed collection to change materially.